



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,660	02/15/2001	M. Salahuddin Khan	N0084 US	2233

7590

12/08/2003

Navigation Technologies Corporation
Attention Patent Department
222 Merchandise Mart Plaza
Merchandise Mart Suite 900
Chicago, IL 60654

EXAMINER

NOLAN, DANIEL A

ART UNIT

PAPER NUMBER

2654

DATE MAILED: 12/08/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,660

Applicant(s)

KHAN ET AL.

Examiner

Daniel A. Nolan

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18,20 and 21 is/are allowed.
- 6) ☒ Claim(s) 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 14 July 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03 November 2003 has been entered.

Response to Amendment

2. The filing of 14 July 2003 was applied with the effect that claim 19 was changed as indicated and examined on the merits.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2654

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wakisaka et al (U.S. Patent 6,112,174) in view of Ashby^{'419} (U.S. Patent 5,974,419).

6. Regarding claim 19, Wakisaka et al (column 2 line 52) reads on the feature of a *positioning system that determines a current location of a vehicle in a region* (col 3 lns 26-27);

- Wakisaka et al (column 54-63) reads on the feature of *an automatic speech recognition system that matches data representations of words spoken by a user of the vehicle to a word list of data representations of spoken names of geographic features*,
- Wakisaka et al (AREA 1-n in figure 3b) reads on the feature that *the word list of data representations of spoken names of geographic features includes only a portion of*

all available data representations of spoken names of geographic features contained in a geographic database

... because, each AREA of Wakisaka et al changes nature depending on whether they are in use or not, the remaining dictionaries of Wakisaka et al (as in figure 3B) read on the feature that *the word list of data representations of spoken names of geographic features includes only a portion of all available data representations of spoken names of geographic features,*

- When the vehicle is in the appropriate AREA, Wakisaka et al reads on the feature that a 1st part that changes to include different words as the vehicle travels in the region such that the 1st part includes words for names of geographic features in proximity to the current location of the vehicle;

The configuration of Wakisaka et al (col 2 lns 23-col 3 ln 45) reads on the feature of a 1st part and a 2nd part (corresponding to the 1st storage unit of claim 13 in col 11 lns 57-62), without explicitly stating that the 2nd part does not change. With the invention for *parcelization of geographic data for storage and use in a navigation application*, Ashby^{'419} describes a system simultaneously representing both *destination and present position* (col 5 lns 38-42).

This *destination* information reads on the feature that the word list includes a 2nd part that does not change to include different words as the vehicle travels in the region and that includes words for names of selected geographic features located throughout the region (col 5 lns 30-36) wherein both the 1st and the 2nd part are available to the

automatic speech recognition system at the same time (particularly when representing a trip, col 2 lns 42-46).

This would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Ashby⁴¹⁹ to the device/method of Wakisaka et al because throughout the course of the trip, *destination* information does not change, while the *present location* does with the progress of the journey.

Allowable Subject Matter

7. Claims 1-18 and 20-21 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

- The present invention is directed to ***building a dictionary of places anticipating a request that might be spoken while driving, the places being selected on the basis of closeness to the vehicle.***
- The closest prior art of record Wakisaka et al operates to continually build speech dictionaries, basing replacement on recognition failure and using maps from location sets based on position rather than individual distance. Other close prior art of DeLorme et al, does select places within a distance of a route, but only to display location on a map or for presentation of site information.

Art Unit: 2654

- Claims 1, 6, 12 and 20 each identify the uniquely distinct features of "*determining whether a distance from the current position of the vehicle to a position associated with a previous build of a speech recognition word list exceeds a threshold; and (if the distance exceeds the threshold), forming a new speech recognition word list by adding names of geographic features located in proximity to the current position of the vehicle to a plurality of words that correspond to a collection of geographic features selected without regard to proximity to the current position of the vehicle.*"
- While the closest prior art together could disclose a mechanism of *determining distances between a place and a vehicle and using an appropriate dictionary*, the dissimilarities between the effort of collecting elements meeting criteria for display and using prepared data for speech recognition is sufficiently great that the prior art of record would fail to anticipate or render the above underlined limitations obvious.
- Claims 2-5, 7-11, 13-18 and 21 depend on claims that have been found to be allowable and so would they themselves be allowed as a consequence.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ashby^{'803} (U.S. Patent 6,081,803 A) support for alternative words for names and features in a geographic database used with a navigation program.

- Robinson et al (U.S. Patent 6,188,955 B1) storing cartographic route data creates a stable list of destination features and another list varying with GPS received enroute.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, supervisor Richemond Dorvil can be reached at (703)305-9645.

The fax phone number for Technology Center 2600 is (703)872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE". Formal response to this action may be faxed according to the above instructions,

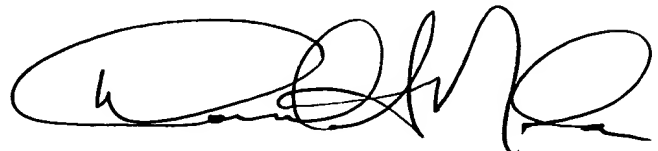
or mailed to: P.O. Box 1450
Alexandria, VA 22313-1450

or hand-deliver to: Crystal Park 2,
2121 Crystal Drive, Arlington, VA,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan
Examiner
Art Unit 2654

DAN/d
December 4, 2003



DANIEL NOLAN
PATENT EXAMINER